

Photointerrupters(Reflective)

KODENSHI

SG - 107F3

The SG - 107F3 reflective sensor combines a GaAs IRED with a high - sensitivity phototransistor in a super-mini package, reducing installation space.

FEATURES

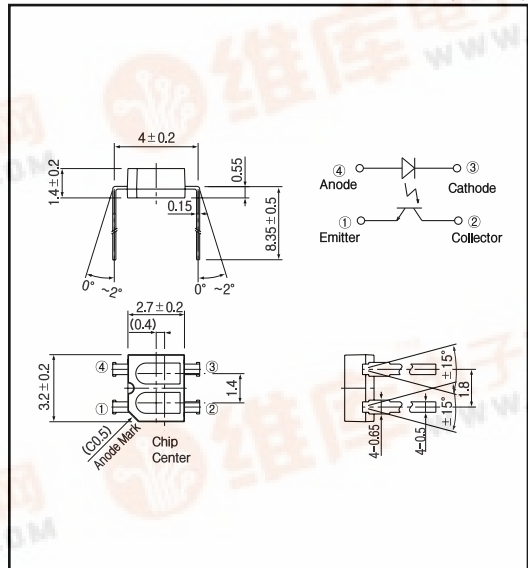
- Compact
- High performance
- High - speed response
- Easy to mount on P.C.B.
- Widely applicable

APPLICATIONS

- Timing sensors
- Edge sensors
- Micro floppy disk drives
- Level sensors of liquid

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit	
Input	Power dissipation	P _D	75	mW
	Reverse voltage	V _R	5	V
	Forward current	I _F	50	mA
	Pulse forward current ¹	I _{FP}	1	A
Output	Collector power dissipation	P _C	50	mW
	Collector current	I _C	20	mA
	C - E voltage	V _{CEO}	30	V
	E - C voltage	V _{ECCO}	3	V
Operating temp.	T _{opr.}	- 25 +85		
Storage temp.	T _{stg.}	- 30 +100		
Soldering temp. ²	T _{sol.}	240		

¹ 1. t w 100 μsec. period :T=10msec.

² For MAX. 5 seconds at the position of 2mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Input	Forward voltage	V _F	I _F =10mA		1.3	V
	Reverse current	I _R	V _R =5V		10	μA
	Peak wavelength	λ _p			940	nm
Output	Collector dark current	I _{CEO}	V _{CE} =10V		0.2	μA
	High current	I _L	V _{CE} =5V, I _F =4mA	35	5	μA
	Leakage current	I _{CEO0}	V _{CE} =5V, I _F =10mA			0.2
Switching speeds	Rise time	t _r	V _{CC} =2V, I _L =100μA, R _L =1k		30	μsec.
	Fall time	t _f			25	μsec.

